

REMARKS

Claims 1-6 and 8-28 have been examined, with claims 1-6, 8, 10-21, and 23-28 rejected, and claims 9 and 22 have been objected to.

Applicant thanks the Examiner for the indication of allowable subject matter in claims 9 and 22. In response, Applicant has amended the claims such that amended independent claims 1, 14, and 21 are directed to the allowable subject matter.

Turning to the prior art rejections, claims 1-6, 8, 10-21, and 23-28 have been rejected under 35 USC 103(a) as being unpatentable over Nicol et al. (U.S. Patent No. 6,141,762; hereinafter "Nicol") in view of Perry et al. (U.S. Patent No. 5,142,684; hereinafter "Perry").

Amended independent claim 15 recites that the energy available to the controller is produced from electromagnetic energy supplied externally from a contact-less terminal, so that the energy available to the controller depends on the distance between the chip card and the contact-less terminal. Thus, "the energy available to the controller" denotes the currently available power, i.e. energy per time, available to the controller. Accordingly, amended claim 15 clearly defines that the currently available power is determined and that, dependent thereon, the controller clock with which the controller is operated, is set.

As admitted by the Examiner, Nicol does not teach using the available energy as a parameter for controlling a controller clock. Rather, Nicol et al. teaches a minimization of an overall power consumption of a multi-processor chip by dynamically controlling processing a load of chips and controlling, significantly greater than on/of granularity, the operating frequencies and voltages of the chips. The operating frequency, however, is set dependent on the individual tasks of the individual processing elements of the multi-processor chip and the completion time required only.

Perry does not make up for Nicol's deficiency. Perry is concerned with power conservation and battery life extension. However, in Perry, the battery level is queried only in steps 35 and 40 and, in both cases, the query result is not used in order to set a controller clock.

Rather, in the case of step 35, the battery level is checked in order to determine whether the high-performance microprocessor should be activated at all and, in case of step 40, the battery level is checked in order to determine as to whether the battery level is near the critical level, in which case the high-performance microprocessor's operation is stopped and the apparatus is shut down. In particular, Perry et al. teaches the switching between a low-performance microprocessor and a high-performance processor, wherein the high-performance microprocessor performs the actual tasks of the battery-operated apparatus. In this normal operation, the high-performance microprocessor 20 of Perry selects its own clock speed based upon the task to be performed by including a clock speed in each software sub-routine which controls a task. The software sub-routine associated with a task is thereby executed at its associated clock speed, which may be chosen to be the lowest possible clock speed consistent with the task to be performed (see Perry's Abstract). That is, depending on the battery level, Perry commences an operation where the clock speed is selected based upon tasks to be performed. However, from the time commencing this mode of operation, there is no dependency of the clock speed selection on the battery level.

Thus, Perry neither teaches nor suggests the solution as defined in amended claim 15. Claim 15 presents a solution for optimally using a currently available power in the case of retrieving this power from an electromagnetic field in a contact-less manner. By this measure, it is possible to maximize the computation speed in order to consume as much as power as possible. Contrary thereto, Perry's high-performance processor is to reduce the power consumption as far as possible. Thus, neither Nicol nor Perry teaches or suggests the subject matter of amended claim 15.

In view of the above, Applicant believes the pending application is in condition for allowance.

Application No. 10/724,016
Amendment dated December 4, 2007
Reply to Office Action of August 24, 2007

Docket No.: S0193.0009

In the event a fee is required or if any additional fee during the prosecution of this application is not paid, the Patent Office is authorized to charge the underpayment to Deposit Account No. 50-2215.

Dated: December 4, 2007

Respectfully submitted,

By Laura C. Brutman

Laura C. Brutman

Registration No.: 38,395

DICKSTEIN SHAPIRO LLP

1177 Avenue of the Americas

New York, New York 10036-2714

(212) 277-6500

Attorney for Applicant